

Preparing for Mega-disasters
Irwin Redlener, M.D.
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Eric Holdeman attended this Town Hall session that featured Dr. Irwin Redlener who is the Director for the National Center for disaster Preparedness that is associated with Columbia University.

He wants to talk about the consequences of all these events. He was at Katrina after only a few days following the hurricane. He found that communications interoperability challenge was just as bad following Katrina as was in NYC during the 9/11 Attacks.

There is a an ongoing disaster in the Gulf for healthcare. It shows a failure in imagination and planning.

He was here to speak about mega-disasters, not just the day-to-day emergencies and “normal” disasters.

Mega-disaster: A catastrophic, high-consequence event, irrespective of cause, that overwhelms or threatens to overwhelm local and regional response capacity.

Sample mega-disasters

- Nuclear detonation (not a dirty bomb) 55 countries in the world have the core capability to construct a nuclear weapon. What is needed is a grapefruit size piece of plutonium. Former Soviet States have about 100 tons of this material. The security of the storage sites are in question.
- Major storm surge:
- High-Richter Urban Earthquake. This Nisqually earthquake will be nothing in comparison to what a Seattle Fault earthquake can do.
- Solar Storm
- Bio terror attack or severe pandemic

Can we face reality? Can we do it without becoming “disaster-obsessed?”

There have been three recent defining moments of vulnerability and risk: Wake-up calls or snooze alarms?

1. The attacks of September 11th, 2001 with 3,000 killed
2. Hurricane Katrina, August 29, 2005, 100,000 square miles, 1.5 million evacuees
3. Pandemic Fever. [Pan Flu]

Only 44% (64% in 2003) of Americans feel confident in the government's ability to protect them from terror attack: 23% are confident that the health care system could respond effectively to a pandemic. The Public's perception in this case is correct!

A system in trouble:

- Technology not ready; bio-detection, radiation monitoring, communications systems
- Ports, borders, transportation systems, infrastructure—not secure. American Society of Engineers estimates that the fixes to our nation's deteriorating infrastructure will require \$2.7 Trillion.
- Health & public health capacity insufficient
- Urban evacuation and disaster response plans not ready
- More than \$200B spent on the pipeline, accountability is essentially non-existent
- Minimal or inadequate direction or guidance from funding sources (no functional master plan or benchmarks)
- Redundancy, bureaucratic barriers, fragmentation & turf battles are rampant

In Seattle and Washington state (5th in federal critical assets ranking)

- Pandemic
- Earthquake
- Borders are weak
- Volcano
- Etc.

Pandemic Influenza

Assumptions:

- Attack rate of 30%
- Hospitalization rate: 10%
- Mortality rate: 3.0% of those infected

Expectations for King County are:

538,000 people sick
65,000 hospital admissions
16,140 deaths including 4,000 children

Not enough vaccine, antiviral meds, hospital beds, ventilators, morgue space, advanced pediatric care capacity, etc.

Non-medical, high-impact consequences of pandemic for the health care system:

- Possible closures & reduced interstate commerce
- We need \$5B just for hospitals

A personal take on being prepared.

Rx: Federal government

- Rebuild, restructure FEMA
- Rethink congressional oversight
- Rethink relationship between federal assets
- Work with states on border security

Rx: Washington State & Seattle

- Develop realistic threat assessment to guide appropriate preparedness planning
- Create accountable, coordinated, empowered seismic safety boards
- Secure all critical infrastructure, including transportation systems \$ mandatory retrofitting of all high-risk buildings
- Ensure surge capacity of health care system
- Work with feds to secure border.

Advice for citizens:

- Have the basics in supplies for sheltering –in-place or evacuation
- Family communications & logistics plan (know your true dependency network)
- Stay healthy—and learn CPR
- Situational awareness

Post Katrina, pre-pandemic makes America in transition. We are in a struggle to define, finance and establish a nation” prepared for disasters.

We cannot equate spending money with paying attention to the problem.

In essence we have had “Random acts of preparedness” from our federal government. We deserve better.